

Unit F: Accidents and Emergencies

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Bus Accidents

School bus accidents are costly in human suffering and in economic costs. Each day the school bus is on the road loaded with children, there is the potential for tragedy. Improper driving by the school bus driver as well as improper driving by others in the environment can cause accidents. Many accidents are avoidable by properly trained drivers who are attentive to their duties and follow the rules of the road.

Accidents, breakdowns, and other delays affect the efficiency of a good pupil transportation program. To avoid accidents and minimize breakdowns and delays, drivers should be trained to deal with a variety of situations that may arise, and the driver must be fully prepared for emergencies.

I. Accident Factors

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Accidents are caused by a combination of factors. These factors fall within three categories: human, vehicle, and environment. The human factor involves behavioral actions and errors of the driver. The vehicle factor relates to aspects of the vehicle such as size, maneuverability, and condition. The environment factors include the roadway, other vehicles, pedestrians, passengers, and the weather.

Understanding how each factor affects accidents may help prevent the same combination of factors from producing a loss in the future. Knowledge of the contributing factors can help to avoid future accidents.

II. Potential School Bus Accident Situations

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1. During loading and unloading procedures
2. Accidents resulting from driver inattention
3. Accidents resulting from children not following the rules

4. Accidents resulting from the driver's inability to control the vehicle
5. The driver's inability to maneuver around objects or people
6. Accidents resulting from improperly adjusted mirrors
7. Accidents resulting from improper backing

Discussion: Discuss and cite areas in the division which may pose potential accidental situations for drivers.

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What can be done to avoid these accidents?

- Instruct students on the proper procedures for loading and unloading, emphasizing all safety precautions
 - Pay close attention to the driving task; driving is a full-time job requiring the driver's full attention
 - Gain the proper skills necessary to maneuver the bus and use good common sense -- do not move the bus if in doubt
 - Keep all mirrors in proper adjustment at all times
 - Conduct a thorough pre-trip and post-trip inspection to detect vehicle defects that may cause an accident or breakdown
 - Back only when necessary and if safe to do so
- Note: Drivers should notify a supervisor when consistent hazardous conditions exist.

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"Knowledge is the key to success." This frequently quoted phrase is true, even within the school division's transportation system. The more we know about a situation, the more likely we are to understand it. A detailed post-incident analysis of any event (accident or breakdown) will provide the required understanding to help avoid a potential accident situation in the future.

III. Accident Procedures

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1. Remain calm and keep others calm
2. Secure the bus by:

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- a. Turning the ignition off and removing the key
- b. Setting the parking brake
- c. Activating the four-way emergency flashers
- d. Do not move the bus after an accident unless told to do so by law enforcement personnel. The post accident position of the bus is important to the police officer reconstructing the accident.

3. Students should remain on the bus unless
 - a. There is a threat of fire
 - b. There is the possibility of a subsequent accident due to the location of the bus
 - c. There is the possibility of drowning
 - d. The bus is on the railroad tracks or close to the crossing

4. Notify the proper authorities and the transportation supervisor immediately. Indicate the location of the accident, the extent of injuries if known, and what emergency equipment will be needed. Never allow a student to leave the bus for help.

5. Check students for injuries and give first aid if necessary

6. As soon as possible, place the reflective triangles outside the bus to alert other drivers. The warning devices should be placed at the appropriate distance from the bus to allow adequate time for approaching vehicles to react accordingly. The distance will vary according to the physical features of the road and weather conditions.

7. Do not allow students to leave the accident scene unless directed to do so by law enforcement personnel or authorized school board personnel.

8. The following information should be collected and made available to the transportation department and other appropriate officials:

- a. Pupils' names, ages, and addresses
- b. School bus information and registration
- c. Insurance information
- d. Information pertaining to other vehicle(s) and driver(s)
- e. Witnesses' names, addresses, and telephone numbers

- f. A brief description of what took place or what was observed immediately before, during, and after the accident

9. Complete the remainder of the route if local policy permits and the bus has been released or another bus has been supplied and the driver is released to complete the route.

IV. Driver Negligence

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Some school bus accidents occur as a result of driver negligence. Drivers must always operate the bus carefully and show mature judgment.

There is little room in a transportation system for driver negligence.

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Driver negligence occurs when drivers do not follow all the rules and regulations and do not practice safe driving habits. A driver can be held personally responsible if a risk is taken and an accident occurs. School divisions carry insurance for liability incurred in pupil transportation, but the bus driver can also be held personally liable, separately from the school system.

V. Post-Accident Procedures

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Virginia Administrative Code
(§8VAC20-70-140)

Accident reports serve many functions. Providing relevant information regarding an accident helps others determine the contributing human, vehicular, and environmental factors that lead to the accident. With this information, prevention measures can be developed and implemented.

If an accident involves an injury or property damage exceeding a specific threshold, the division must file a report. It is imperative that the driver collects accurate information in order to file a complete and correct report.

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A report, on form(s) or in a format furnished by the Department of Education, of any crashes or incidents involving school buses, pupils, and personnel who ride school or activity buses (including injury or death while crossing the road, waiting at bus stops, etc.) shall be sent to the Pupil Transportation Service, Department of Education by the division superintendent or designee at least once a month. The report shall give the apparent cause of the crash or incident, and the extent of injuries to pupils or others. The division superintendent or designee shall notify the Pupil Transportation Service of any school bus crash or incident involving serious injuries, requiring professional medical treatment, or death within the next working day from the date of the crash or incident.

A crash occurs when property damage is \$1000.00 or more or when persons are injured. An incident occurs when property damage is \$999.00 or less and there are no injuries.

1. Incidents involving pupil injuries
 - a. All injuries, minor or major, should be reported to the appropriate school official.
 - b. If an incident produces a serious injury, immediately contact the appropriate officials and request appropriate emergency services.
 - c. Complete the appropriate reports and give them to the transportation supervisor, as soon as possible.
2. Incidents involving pedestrians or damage to personal property
 - a. Report the incident to the appropriate officials.
 - b. If a pedestrian is injured, request the appropriate emergency services immediately.
 - c. Gather all information necessary to complete all reports.
 - d. The driver should provide their name, school division, and bus number to the injured party or to the owner of the damaged property if possible.
 - e. Collect data and keep records for future reference.

- f. All accidents involving any personal property, for example, mail boxes, highway signs, etc. must be reported to the owner of the property and to the appropriate officials.

Discussion: Discuss in detail the division's accident procedures.

VI. Mechanical Breakdown -- General Procedures

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1. If the bus breaks down, the driver should stop as close to the right of the road as possible or on the shoulder to get out of the way of traffic. If the driver uses the shoulder, she/he should make sure the bus will tolerate the weight of the bus. Activate four-way emergency flashers.

Note: Traffic warning lights can only be used when in the process of loading or unloading passengers.

2. Secure the bus by setting the parking brake, turning off the ignition, and removing the key.
3. Have the passengers stay inside the bus, unless doing so is potentially dangerous to the students.
4. Place reflective triangles outside the bus at the appropriate distance.
5. Use the radio (if so equipped) or ask an adult pedestrian or passing motorist to notify the proper school official. Give this person the telephone number and the name of the individual to contact. Never allow a student to go for assistance. Cell phones may be used, but never while the bus is in motion.
6. Finish the route as soon as the bus is repaired or a replacement is provided.

VII. Emergency Equipment

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The school bus driver must be familiar with all emergency equipment provided and before each trip should ensure the equipment is in sufficient supply and in proper working order. The driver of activity or extracurricular trip buses shall advise the pupils and sponsors of the location of

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the emergency equipment prior to the beginning of any trip.

1. Reflective Triangles

All buses must be equipped with reflective triangles. In an emergency they should be placed at a sufficient distance from the bus (front and back) to allow adequate time for approaching traffic to react accordingly. The reflectors must be placed in the lane occupied by the bus as follows:

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a. On a two-lane road carrying traffic in both directions or on an undivided highway place warning devices within 10 feet of the front or rear corners of the vehicle. Place a warning device 100 feet behind or ahead of the vehicle. Place it on the shoulder or in the lane where the vehicle is stopped.

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b. In poor visibility or on a hill or curve place a warning device before any hill, curve or anything else that prevents other drivers from seeing the bus within 500 feet.

c. On a one-way or divided highway place warning device 10 feet, 100 feet and 200 feet behind the vehicle.

2. Four-way emergency flashers on the vehicle are an important part of the vehicles emergency equipment. They should be activated in the event of an emergency to warn approaching traffic. They may also be activated when the vehicle is traveling at a speed much slower than the surrounding traffic.

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3. First aid kit and body fluid clean-up kit must conform to Virginia School Bus Specifications:

First Aid Kit

1. Bus shall carry Grade A metal or rigid plastic first-aid kit, unit-type, mounted in full view and in an accessible place in the front of the bus and identified as a first-aid kit.
2. The first-aid kit shall contain the following items:

- a. Bandage compress (sterile gauze pads) 4-inch (3 units)
- b. Bandage compress (sterile gauze pads) 2-inch (2 units)
- c. Adhesive absorbent bandage (non-adhering pad) 1 x 3 inch (2 units)
- d. Triangular bandage, 40-inch (2 units)
- e. Gauze bandage, 4 inch (2 units)
- f. Absorbent-gauze compress (1 unit)
- g. Antiseptic applicator (swab type) 10 per unit (2 units) (Zephiran Chloride/Green Soap type)
- h. Bee sting applicator (swab type) 10 per unit (1 unit)
- i. Pair medical non-latex examination gloves (1 unit)
- j. Mouth-to-mouth airway (1 unit)

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Body Fluid Clean Up Kit

- a. One pair non-latex gloves
- b. One pick-up spatula or scoop
- c. One face mask
- d. Infectious liquid spill control powder
- e. Anti-microbial hand wipes – individually wrapped
- f. Germicidal disinfectant wipes – tuberculocidal
- g. Plastic disposal bag with tie

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4. Fire extinguisher

- a. Remove from bracket
- b. Position properly with an exit or means of escape towards the back, before attempting to extinguish a fire
- c. Pull the pin
- d. Aim at the base of the fire
- e. Squeeze the top handle lever
- f. Sweep from side to side

VIII. Bus Evacuation

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Virginia Administrative Code
(§8VAC20-70-110)

The bus evacuation procedures will be determined by the nature of the emergency. Since the emergency dictates the exits used,

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riders should be familiar with each emergency exit of the bus.

Discussion: Discuss in detail the requirement of school bus evacuations.

All the bus riders in case of an emergency should know the pre-planned evacuation procedure. To help familiarize riders with evacuation procedures and to comply with state law, emergency drills are required to be conducted at least twice a year. In addition, training should include pre-planning in the event the driver is incapacitated.

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There are several ways to evacuate the bus.

Types of evacuations are:

- All riders leave through the passenger entry door
- All riders leave through the rear emergency exit door
- Riders in the front half of the bus leave through the front passenger entry and those in the rear portion leave through the rear emergency exit door
- Riders exit through the side emergency exit door alone, or in combination with the above
- Riders exit through the roof hatch emergency exit if this is the only option available

Note: Some buses are equipped with emergency exit windows and emergency roof hatches. If the bus has these special emergency exits, their location and use must be fully explained to the riders.

IX. Evacuation Procedures

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In an actual emergency or drill follow these procedures:

1. Secure the bus
 - a. Turn ignition off and remove key
 - b. Set parking brake
 - c. Activate four-way flashers

2. Driver stands, opens the front passenger entry door (if this is a front door evacuation) and gets attention of students
3. Driver gives the command "Emergency drill, remain seated, front evacuation." The command

should reflect whatever mode of evacuation the driver has selected.

4. Driver should stand between the first two seats to be evacuated, (seats closest to the evacuation door) face the door and direct students to exit seat by seat starting on the right and alternating to the left. Instruct students to walk, not run.
5. Student helpers should help evacuees as they exit (secure parental permission) and guide students to the rally point.
6. Students should stand in a group at least 100 feet away from the bus.
7. Driver must make sure that no one is left on the bus.
8. Driver should stand with students and provide further instruction if necessary.
9. Critique students on performance. Make sure to praise them if the evacuation was efficient.

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Crash Examples

Unit Review

1. Many accidents are _____ by properly trained drivers who are attentive to their duties and follow the rules of the road.
2. Accidents are caused by a combination of factors. These factors fall within three categories: 1. _____ 2. _____ 3. _____
3. " _____ is the key to success."
4. Do not move the bus after an accident unless told to do so by _____ personnel.
5. Notify the proper authorities and your _____ immediately.

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6. Do not allow students to leave the accident scene unless directed to do so by _____ personnel or authorized _____ personnel.
7. Driver negligence occurs when drivers do not follow all the _____ and _____ and do not practice safe driving habits.
8. It is imperative that the driver collects _____ information in order to file a complete and correct report.
9. If the bus breaks down, stop as close to the right of the road as possible or on the shoulder. Place _____ outside the bus at the appropriate distance.
10. All the bus riders in case of an emergency should know the _____ procedure.
11. Emergency exit drills shall be practiced by _____ pupil riders at least _____ a year.

Answers

1. avoidable
2. human, vehicle, and environment
3. Knowledge
4. law enforcement
5. transportation supervisor
6. law enforcement, authorized school board
7. rules, regulations
8. accurate
9. reflective triangles
10. pre-planned evacuation
11. all , twice